

Achoo! Avoid the Flu: This Year's Vaccines and Recommendations

By August J. Valenti, MD, FACP, FIDSA, FSHEA, Professor of Medicine, Tufts University School of Medicine; Hospital Epidemiologist, Director, Special Infectious Diseases Unit, and Interim Medical Director, Employee Health Unit, Maine Medical Center

The 2018 - 2019 influenza season is upon us. There has been some recent influenza activity in the Portland area (H1N1). The CDC is urging that everyone over the age of six months be vaccinated against influenza before the end of October. This is especially important for high-risk groups *and* those who care for them. The CDC lists the following groups as priorities:

- Children aged six months through four years (59 months)
- People aged 50 years and older¹
- People with chronic pulmonary (including asthma), cardiovascular (except hypertension), renal, hepatic, neurologic, hematologic or metabolic disorders (including diabetes mellitus)
- People who are immunosuppressed (including immunosuppression caused by medications or by Human Immunodeficiency Virus)
- Women who are or will be pregnant during the influenza season and women up to two weeks after delivery
- People who are aged six months through 18 years and receiving long-term aspirin therapy and who therefore might be at risk for experiencing Reye syndrome after influenza virus infection
- People who are residents of nursing homes and other chronic-care facilities
- American Indians/Alaska Natives
- People with extreme obesity (body-mass index [BMI] is 40 or greater)
- Health care personnel
- Household contacts and caregivers of children younger than five years and adults aged 50 years and older, with particular emphasis on vaccinating contacts of children aged younger than six months
- Household contacts and caregivers of people with medical conditions that put them at higher risk for severe complications from influenza

Influenza is associated with significant morbidity and mortality. While there are antiviral treatments for influenza, prevention is still the best way to reduce morbidity and mortality in every flu season. Health care workers have a particular responsibility to their patients, coworkers, families and themselves to be vaccinated (unless, of course, there is a valid contraindication to receiving the vaccine). No influenza vaccine is 100 percent effective, but the more people vaccinated, the greater the likelihood of decreasing spread within a population.

There are a variety of approved vaccines this season and delivery options, including a high-dose trivalent vaccine (2 strains of Influenza A and one strain of Influenza B), which is thought to induce better responses in patients 65 and older. Vaccine viruses

¹ Among adults, complications, hospitalizations, and deaths due to influenza are generally most common among those 65 years old and over. However, adults 50 years old and over are a priority group for vaccination because this group may be more likely to have chronic medical conditions that put them at higher risk of severe influenza illness.

included in the 2018-19 U.S. trivalent influenza vaccines will be an A/Michigan/45/2015 (H1N1)pdm09-like virus, an A/Singapore/INFIMH-16-0019/2016 (H3N2)-like virus, and a B/Colorado/06/2017-like virus (Victoria lineage). Quadrivalent influenza vaccines will contain these three viruses and an additional influenza B vaccine virus, a B/Phuket/3073/2013-like virus (Yamagata lineage).

Studies have shown that even patients with severe egg allergies can safely receive egg-based influenza vaccines; however, employees with significant concerns about egg-allergies or any prior allergic reaction to influenza vaccines should feel free to ask about this or to consult with their personal providers before receiving a vaccination.

Those looking for recommendations regarding which vaccines are right for family members or children are strongly urged to discuss with their own providers; pediatric vaccinations should be discussed with your child's pediatrician.

It is important to remember that treatment for influenza must be given early in the course of the disease and is not always effective. Antivirals may also be prescribed to prevent disease in certain circumstances. There are a number of rapid tests for patients suffering from influenza-like illnesses that may help confirm a diagnosis of influenza, but their sensitivity and specificity vary, and may not always be reliable.